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CAS/STN FILE 'REGISTRY' ENTERED AT 10:23:17 ON 07 JUN 2005
                    OUINOLINE/CN
             1 S
             1 S 2-BENZAZINE/CN
L2
L3
             1 S ISOQUINOLINE/CN
L4
          17744 S 591.50.52/RID AND (BENZENE OR PHENYL)
             1 S PHENYLISOQUINOLINE/CN
L5
          22305 S 591.50.52/RID AND 46.150.18/RID
L6
                    (PHEN#### OR BENZ######) (4A) (ISOQUINOLIN?
L7
         233038 S
               OR QUINOLIN? OR BENZAZIN? OR BENZOPYRIDI? OR AZANAPHTHALEN?)
           9888 S L6 AND L7
L8
L9
           4610 S
                    L8 AND (3 OR 9)/NR
            560 S
L10
                    L9 AND F/ELS
            502 S
                    L9 AND (FLUOROPHEN? OR FLUOROBENZ? OR TRIFLUOR? OR FLUOROMETH?)
L11
            0 S
                    (L10 OR L11) AND (IR/ELS OR IRIDIUM)
L12
          26761 S
                    (L4 OR L5 OR L6 OR L7)
L13
                    AND (FLUOROPHEN? OR FLUOROBENZ? OR TRIFLUOR? OR FLUOROMETH?)
            41 S
                   L13 AND (IR OR IRIDIUM)
L14
            18 S L14 AND TRIS
L15
L16
            39 S L14 AND KAPPA
           18 S L15 AND TRIFLUOR?
L17
           18 S L15 AND TRI FLUOR?
L18
           18 S L15 AND FLUOROMETH?
L19
           36 S L14 AND FLUOROMETH?
L20
           40 S L14 AND TRI FLUOR?

40 S L14 AND TRIFLUOR?

36 S L20 AND (L21 OR L22)

18 S (L17 OR L18 OR L19)

36 S (L23 OR L24)
L21
L22
L23
L24
L25
           4638 S (L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10
L26
            OR L11 OR L12 OR L13) AND (BIFLUOR? OR DIFLUOR? OR (DI OR BI OR BIS) (1A) FLUOR?)
           4638 S (L6 OR L7) AND L26
L27
L28
            43 S L27 AND IR/ELS
L29
            41 S L27 AND IRIDIUM
                    (L28 OR L29)
L30
            43 S
             37 S
                   L30 NOT L25
L31
                D FIDE 1-37
L32
        245454 S
                    (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR
                L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR L16 OR
                L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR L25 OR
                L26 OR L27 OR L28 OR L29 OR L30 OR L31) NOT (L30 OR L25)
        245382 S
33856 S
128 S
                    L32 AND (L6 OR L7)
L33
L34
                    L33 AND F/ELS
                    L34 AND IR/ELS
L35
            128 S
                   L35 NOT 2005?/ED
L36
           121 S L35 NOT 2004?/ED
L37
            99 S L35 NOT 2003?/ED
L38
L39
           104 S L35 NOT 2002?/ED
L40
            68 S L35 AND L36 AND L37 AND L38 AND L39
L41
            68 S L40 NOT (L30 OR L25)
     FILE 'STNGUIDE' ENTERED AT 10:49:41 ON 07 JUN 2005
     FILE 'REGISTRY' ENTERED AT 10:55:23 ON 07 JUN 2005
L42
           100 S
                    435294?/RN
L43
            84 S
                    L42 AND IR/ELS
            42 S
31 S
L44
                    L43 AND TRIS
L45
                    L44 AND F/ELS
L46
            29 S
                    L45 AND (L6 OR L7)
     FILE 'HCAPLUS' ENTERED AT 10:56:39 ON 07 JUN 2005
L47
             3 S L46
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# JP priority date of 11/30/2000

# L47 ANSWER 3 OF 3 HCAPLUS COPYRIGHT ACS on STN

AN 2002:428917 DN 137:26190

TI Electroluminescence element and electroluminescent display device containing the same

IN Kamatani, Jun; Okada, Shinjiro; Tsuboyama, Akira; Takiguchi, Takao; Miura, Seishi; Noguchi, Koji; Moriyama, Takashi; Igawa, Satoshi; Furugori, Manabu

PA Canon Kabushiki Kaisha, Japan

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 2002044189	A1	20020606	WO 2001-JP10487	20011130
	AU 2002022566	A5	20020611	AU 2002-22566	20011130
	EP 1348711	A1	20031001	EP 2001-998553	20011130
	US 2003068526	A1	20030410	US 2002-73012	20020212
PRAI	JP 2000-364650	A	20001130	•	
	JP 2001-64205	A	20010308		
	JP 2001-128928	A	20010426		
	WO 2001-JP10487	W	20011130		

 $\begin{bmatrix} A \\ C \\ B \end{bmatrix}_{m-1} \begin{bmatrix} A' \\ C \\ B' \end{bmatrix}_{n-1}$ 

MARPAT 137:26190

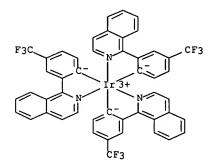
OS

The invention relates to a luminescent element characterized by having a layer contg. a metal coordination compd. which has a partial structure MLm represented by the following general formula I (A, B = isoquinolyl group residue; M = metal) and which as a whole is preferably represented by the following formula MLmL'n (M = IR, Pt, Rh, Pd; m = 1, 2, 3; n = 0, 1, 2; MLm = compd. I; ML'n = compd. II-IV; A', B', B' = ring group residue; E, G = C1-20 alkyl; J = H, C1-20 alkyl). The luminescence element shows the high luminescent efficiency and the good stability.

435294-01-2P 435294-06-7P 435294-07-8P 435294-08-9P 435294-16-9P 435294-17-0P 435294-18-1P 435294-19-2P 435294-20-5P 435294-21-6P 435294-22-7P 435294-23-8P 435294-24-9P 435294-25-0P 435294-27-2P 435294-41-0P 435294-42-1P 435294-43-2P 435294-44-3P 435294-47-6P 435294-48-7P 435294-49-8P 435294-51-2P 435294-54-5P 435294-55-6P 435294-56-7P 435294-57-8P 435294-63-6P 435294-67-0P RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electroluminescence element and electroluminescent display device contg. same) 435294-01-2 HCAPLUS

RN 435294-01-2 HCAPLUS
CN Iridium, tris[2-(1-isoquinolinyl-.kappa.N)-4-(trifluoromethyl)phenyl- .kappa.C]-



RN 435294-06-7 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI)

RN 435294-07-8 HCAPLUS

CN Iridium, tris[2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl- .kappa.C]- (9CI)

RN 435294-08-9 HCAPLUS

CN Iridium, tris[2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-16-9 HCAPLUS

CN Iridium, tris[5-fluoro-2-(5-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-17-0 HCAPLUS

CN Iridium, tris[5-fluoro-2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-18-1 HCAPLUS

CN Iridium, tris{5-fluoro-2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-19-2 HCAPLUS

CN Iridium, tris(5-fluoro-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-20-5 HCAPLUS

CN Iridium, tris[2,4-difluoro-6-(5-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-21-6 HCAPLUS

CN Iridium, tris[2,3,4-trifluoro-6-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-22-7 HCAPLUS

CN Iridium, tris[5-(trifluoromethyl)-2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-23-8 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)-5-(trifluoromethyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-24-9 HCAPLUS

CN Iridium, tris[5-(trifluoromethyl)-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-25-0 HCAPLUS

CN Iridium, tris[2,3,4,5-tetrafluoro-6-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]-

RN 435294-27-2 HCAPLUS

CN Iridium, tris[2,3,4,5-tetrafluoro-6-[5-(trifluoromethyl)-1-isoquinolinyl- .kappa.N]phenyl-.kappa.C]-

RN 435294-41-0 HCAPLUS

CN Iridium, tris[2-(5-fluoro-1-isoquinolinyl-.kappa.N)-4-(trifluoromethoxy)phenyl-.kappa.C}-

RN 435294-42-1 HCAPLUS

CN Iridium, tris{4-(trifluoromethoxy)-2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-43-2 HCAPLUS

CN Iridium, tris[4-(trifluoromethoxy)-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-44-3 HCAPLUS

CN Iridium, tris[2-(5-fluoro-1-isoquinolinyl-.kappa.N)-4-(heptyloxy)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-47-6 HCAPLUS

CN Iridium, tris[2,4-difluoro-6-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]-

RN 435294-48-7 HCAPLUS

CN · Iridium, tris[3,5-difluoro-2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-49-8 HCAPLUS

CN Iridium, tris[2,3,4,5-tetrafluoro-6-(3,4,5,6,7,8-hexafluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-51-2 HCAPLUS

CN Iridium, tris[5-[(3,3,4,4,5,5,5-heptafluoropentyl)oxy]-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

— CF3

CN Iridium, tris[2-(1-isoquinolinyl-.kappa.N)-5-(tridecafluorohexyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-55-6 HCAPLUS

CN Iridium, tris[5-(tridecafluorohexyl)-2-[5-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-56-7 HCAPLUS

CN Iridium, tris[5-(tridecafluorohexyl)-2-[4-(trifluoromethyl)-1-isoquinolinyl-.kappa.N]phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-57-8 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)-5-(tridecafluorohexyl)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

RN 435294-63-6 HCAPLUS

CN Iridium, tris[3,4-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]-

RN 435294-67-0 HCAPLUS

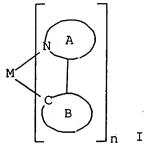
CN Iridium, tris[5-butyl-3,4-difluoro-2-(1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]- (9CI) (CA INDEX NAME)

0/646,349

- L22 ANSWER 34 OF 40 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 2002:429288 HCAPLUS
- DN 137:26192
- ED Entered STN: 07 Jun 2002
- TI Electroluminescent element and electroluminescent display device having the same
- IN Kamatani, Jun; Okada, Shinjiro; Tsuboyama, Akira; Takiguchi, Takao; Miura, Seishi; Noguchi, Koji; Moriyama, Takashi; Furugori, Manabu

PA	Canon	Kabushiki	Kaisha,	Japan
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•••	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	WO 2002045466	Al	20020606	WO 2001-JP10477	20011130
	AU 2002022565	· A5	20020611	AU 2002-22565	20011130
	EP 1349435	A1	20031001	EP 2001-999132	20011130
	US 2003059646	A1	20030327	US 2002-73011	20020212
PRAI	JP 2000-364650	Α	20001130		
	JP 2001-64203	Α	20010308		
	JP 2000-364350	Α	20001130		
	WO 2001-JP10477	W	20011130		
os	MARPAT 137:26192				



The invention relates to a luminescent element having a cathode, an anode, and one or a plurality of layers of org. thin films which is arranged between them, characterized in that at least one of the layers is a light emitting layer which comprises a luminescent mol. of a metal coordination compd. having a basic structure represented by the following general formula I (A, B = ring group residue; M = IR, Pt, Rh, Pd) and having a substituent on at least one of cyclic groups A and B as a guest in a host material at an concn. which is 8 wt. % or greater and is greater than a concn. at which a luminescent mol. of a compd. having a structure analogous to the above and free of the substituent exhibits the max. luminous efficiency. The luminescent element is less susceptible to extinction by concn. even when used at a high concn. in a host material and thus exhibits high efficiency.

# L47 ANSWER 2 OF 3 HCAPLUS COPYRIGHT ACS on STN

AN 2002:978186 DN 138:63633

TI Organic electroluminescent device containing dispersion dopant in the emitting layer

IN Furugori, Manabu; Okada, Shinjiro; Tsuboyama, Akira; Takiguchi, Takao; Miura, Seishi; Moriyama, Takashi; Igawa, Satoshi; Kamatani, Jun; Iwawaki, Hironobu

### PA Canon Kabushiki Kaisha, Japan

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002104080	A1	20021227	WO 2002-JP5891	20020613
	JP 2003068465	A2	20030307	JP 2002-143441	20020517
	JP 2003068466	A2	20030307	JP 2002-143442	20020517
	JP 2003068461	A2	20030307	JP 2002-143443	20020517
	EP 1399002	A1	20040317	EP 2002-738680	20020613
	US 2003141809	A1	20030731	US 2002-207843	20020731
	US 6838818	В2	20050104		
PRAI	JP 2001-181416	A	20010615		
	JP 2002-143441	Α	20020517		
	JP 2002-143442	A	20020517	•	
	JP 2002-143443	A	20020517		
	WO 2002-JP5891	W	20020613		

AB The invention refers to an org. electroluminescent device comprising an emitting material and a dopant for improving dispersion in the emitting layer, wherein the dopant can be a combination of an emitting compd. and a non-emitting compd., or can be a current promoting material. When the dopant contains an emitting compd., the emission wavelength of the dopant is similar to that of the main emitting material. The emitting material and the dopant are placed in the evapn. boat together for improved dispersion of the emitting material, improved emission efficiency and long life.

IT 435294-06-7

(org. electroluminescent device contg. dispersion dopant in emitting layer)

RN 435294-06-7 HCAPLUS

CN Iridium, tris[2-(4-fluoro-1-isoquinolinyl-.kappa.N)phenyl-.kappa.C]-

# 6/15/2001 JP priority date

10/696,401

10/646,349

ANSWER 29 OF 40 HCAPLUS COPYRIGHT ACS on STN

2003:155115 HCAPLUS AN

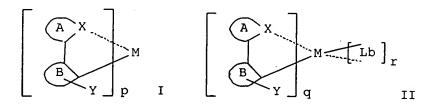
DN 138:212530

ED

Entered STN: 28 Feb 2003

Luminescent organometallic compound and light emitting device

IN	Fujii, Hiroyuki PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2003040627	A1	20030227	US 2002-170396	20020614
	JP 2004059433	A2	20040226	JP 2002-172832	20020613
	CN 1397559	Α	20030219	CN 2002-124374	20020617
PRAI	JP 2001-182507	Α	20010615		
	JP 2002-165353	A	20020606		
os	MARPAT 138:212530			•	



AB Luminescent organometallic compds. are described by the general formulas I and II (A and B represent ring structures, M = a metal atom; X = a hetero atom other than C or H; Y = .gtoreq.1 electron-attracting group connecting to ring structure B; Lb = a unidentate or multidentate ligand; and p, q and r = pos. integers). Light-emitting devices with emitting layers incorporating the compds. are also described.